

## AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

### LISTING OF CLAIMS

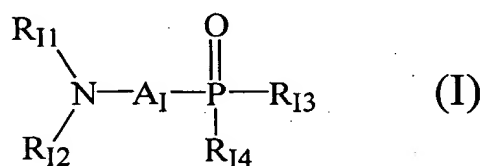
1. (ORIGINAL) Combined preparation comprising as active ingredients at least one anti-infectiously active compound, which inhibits the 2-C-methylerythrose-4-metabolic pathway, and at least one inhibitor of the lipid metabolism, wherein the inhibitor of the lipid metabolism and the anti-infectiously active compound are not identical.
2. (ORIGINAL) Combined preparation according to claim 1, characterized in that the inhibitors of lipid metabolism are selected from the group which consists of cholestyr amine,  $\beta$ -sitosterol, colestipol, probucol, nicotinic acid, nicotinyl alcohol, clofibrin acid derivative and analogues of the clofibrin acid derivative, HMG-CoA-synthetase-inhibitors, HMG-CoA-reductase-inhibitors, squalene synthetase inhibitors and squalene monooxygenase inhibitors.
3. (CURRENTLY AMENDED) Combined preparation according to claim 2, characterized in that the inhibitors of lipid metabolism are inhibitors of the squalene synthetase selected from a group consisting of, in particular ~~pyrophosphates, pyrophosphate derivatives, bisphosphonic acid derivatives, phosphinylmethyl phosphonic acid derivatives, phosphinylformyl derivatives, phosphonocarboxyl derivatives, phosphonosulfonic acid derivatives, and~~

phosphinylmethylphosphonic acid derivatives.

4-5.. (CANCELLED)

6. (CURRENTLY AMENDED) Combined preparation according to claim 2, characterized in that the inhibitors of the lipid metabolism are bisphosphonic acid ~~derivative~~ derivatives selected from a group consisting of, in particular clodron acid derivatives, etidron acid derivatives, pamidron acid derivatives, ~~in particular pamidronat~~, ibandron acid derivatives, ~~in particular ibandronate~~, alendron acid derivatives, ~~in particular alendronate~~, zoledron acid derivatives, ~~in particular zoledronat~~, risedron acid derivatives, tiludron acid derivatives and cimadron acid derivatives.

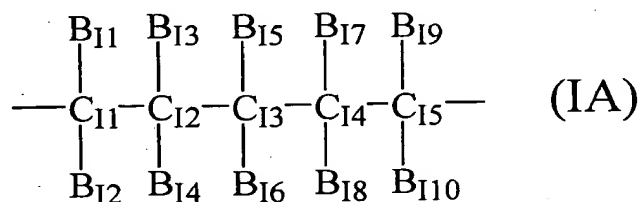
7. (ORIGINAL) Combined preparation according to one of claims 1 to 6, comprising as an active ingredient at least one aminohydrocarbyl phosphonic acid derivative of the general formula (I)



wherein  $R_{I1}$ , and  $R_{I2}$  are the same or different and are selected from the group which consists of H, OH, substituted and unsubstituted acyl, substituted and unsubstituted alkyl, substituted and unsubstituted aryl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted aralkyl, and substituted and unsubstituted heterocyclic radical,

$R_{I3}$  and  $R_{I4}$  are selected from the group which consists of substituted and unsubstituted

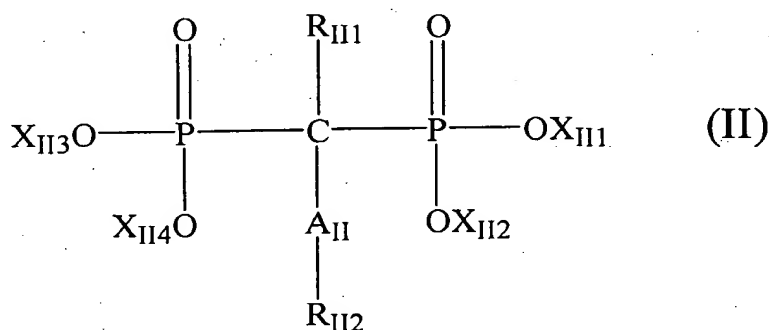
alkyl with 1 to 26 carbon atoms, substituted and unsubstituted hydroxyalkyl with 1 to 26 carbon atoms, substituted and unsubstituted aryl, substituted and unsubstituted acyl, substituted and unsubstituted aralkyl, substituted and unsubstituted alkenyl with 1 to 26 carbon atoms, substituted and unsubstituted alkynyl with 1 to 26 carbon atoms, substituted and unsubstituted cycloalkyl, substituted and unsubstituted heterocyclic radical, halogen,  $X_{13}$  and  $X_{14}$ , wherein  $X_{13}$  and  $X_{14}$  are the same or different and are selected from the group which consists of hydrogen, substituted and unsubstituted alkyl with 1 to 26 carbon atoms, substituted and unsubstituted hydroxyalkyl with 1 to 26 carbon atoms, substituted and unsubstituted aryl, substituted and unsubstituted aralkyl, substituted and unsubstituted alkenyl with 1 to 26 carbon atoms, substituted and unsubstituted alkynyl with 1 to 26 carbon atoms, substituted and unsubstituted cycloalkyl, substituted and unsubstituted heterocyclic radical, a silyl, a cation of an organic and inorganic base, in particular a metal of the first, second or third main group of the periodic system, ammonium, substituted ammonium and ammonium compounds which derive from ethylene diamine or amino acids, and  $A_1$  represents an alkylene radical, alkenylene radical or hydroxyalkylene radical or corresponds to the following formula (IA):



wherein one or more the carbon atoms, selected from the group  $C_{13}$ ,  $C_{14}$ ,  $C_{15}$ , together with their substituents also may be absent, and at least one present substituent out of  $B_{11}$  to  $B_{110}$  is a  $C_{3-8}$ -cycloalkyl- $(C_{0-9})$ -alkyl group, wherein the  $C_{3-8}$ -cycloalkyl group as well as the  $C_{0-9}$ -alkyl group may comprise one or more double bonds and one or two carbon atoms of the cycloalkyl

group may be replaced by nitrogen, oxygen or sulfur atoms, and wherein the cycloalkyl group as well as the alkyl group may be substituted with hydroxy, halogen, amino, oxo groups, with branched or straight C<sub>1-9</sub>-alkyl groups and C<sub>2-9</sub>-alkenyl groups, wherein the C<sub>1-9</sub>-alkyl groups and C<sub>2-9</sub>-alkenyl groups may be substituted with hydrogen, hydroxy, amino, halogen and oxo groups, and the remaining present substituents B<sub>11</sub> to B<sub>110</sub> are selected from the group which consists of hydrogen, hydroxy-, halogen-, amino groups, C<sub>1-26</sub>-alkyl radicals, C<sub>1-26</sub>-alkoxy radicals, C<sub>1-26</sub>-alkoxy-C<sub>1-26</sub>-alkyl radicals or both substituents a C-Atoms together form an oxo group, wherein each C<sub>1-26</sub>-alkyl radical and each C<sub>1-26</sub>-alkoxy radical may be branched or straight and saturated or unsaturated with one or more double bonds and may be substituted with hydroxy, amino, halogen and oxo groups.

8. (CURRENTLY AMENDED) Combined preparation according to one of the claims 1 to 6, comprising as an active ingredient at least one bisphosphonic acid according the general formula



wherein X<sub>II1</sub>, X<sub>II2</sub>, X<sub>II3</sub>, X<sub>II4</sub>, which are the same or different, are selected from the group which consists of hydrogen, substituted and unsubstituted alkyl, substituted and unsubstituted aryl, substituted and unsubstituted aralkyl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted heterocyclic radical, metals of the ~~1., 2. and 3.~~ first, second and third main

~~groups of main group~~ of the periodic systems, such as Na, K, Ca, Mg, Al as well as substituted and unsubstituted ammonium and ammonium compounds ~~which derive~~ derived from ethylene diamine or amino acids,

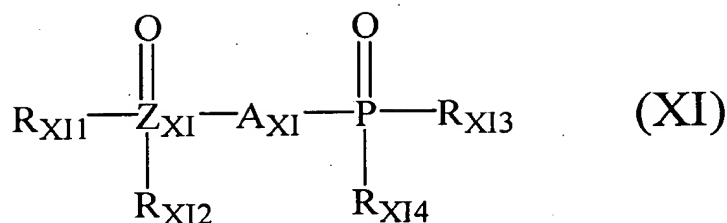
A<sub>11</sub> which also may be absent is selected from the group which consists of alkylene, alkenylene and hydroxyalkylene,

R<sub>111</sub>[[,]] and R<sub>112</sub>, which are the same or different, are selected from the group which consists of H, OH, -NH<sub>2</sub>, substituted and unsubstituted acyl, substituted and unsubstituted alkyl, substituted and unsubstituted aryl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted aralkyl, substituted and unsubstituted heterocyclic radical and -SR<sub>113</sub>, Cl and -NR<sub>113</sub>R<sub>114</sub>, wherein

R<sub>113</sub>[[,]] and R<sub>114</sub>, which are the same or different, are selected from the group which consists of H, OH, substituted and unsubstituted acyl, substituted and unsubstituted alkyl, substituted and unsubstituted aryl, substituted and unsubstituted aralkyl, substituted and unsubstituted cycloalkyl and substituted and unsubstituted heterocyclic radical, or their pharmaceutically acceptable salts, esters as well as salts of esters or compounds, which upon application provide the compounds to be administered as metabolic products or decomposition products.

9.-16. (CANCELLED)

17. (ORIGINAL) Combined preparation according to one of the claims 1 to 6, comprising as an active ingredient at least one compound of the general formula (XI):  
wherein Z<sub>X1</sub> is a phosphorus atom or a sulfur atom,



in which  $\text{A}_{\text{XI}}$  is a straight  $\text{C}_{2-9}$ -alkylene chain with substituents which are the same or different and are selected from the group which consists of hydrogen, hydroxy, halogen, amino and oxo groups,  $\text{C}_{1-26}$ -alkyl radicals,  $\text{C}_{1-26}$ -alkoxy radicals,  $\text{C}_{1-26}$ -alkoxy- $\text{C}_{1-26}$ -alkyl radicals or  $\text{C}_{3-8}$ -cycloalkyl- $(\text{C}_{0-9})$ -alkyl radicals, wherein each  $\text{C}_{1-26}$ -alkyl radical and each  $\text{C}_{1-26}$ -alkoxy radical may be branched or straight and saturated or unsaturated with one or more double bonds and may be substituted with hydroxy, amino, halogen and oxo groups and the  $\text{C}_{3-8}$ -cycloalkyl group as well as the  $\text{C}_{0-9}$ -alkyl group of the  $\text{C}_{3-8}$ -cycloalkyl- $(\text{C}_{0-9})$ -alkyl group may contain one or more double bonds and one or two carbon atoms of the cycloalkyl group may be replaced by nitrogen, oxygen or sulfur atoms, and wherein the cycloalkyl group as well as the alkyl group may be substituted with hydroxy, halogen, amino, oxo groups, with branched or straight  $\text{C}_{1-9}$ -alkyl groups and  $\text{C}_{2-9}$ -alkenyl groups wherein the  $\text{C}_{1-9}$ -alkyl groups and  $\text{C}_{2-9}$ -alkenyl groups may be substituted with hydrogen, hydroxy, amino, halogen and oxo groups, in which  $\text{R}_{\text{XI1}}$  and  $\text{R}_{\text{XI2}}$  are the same or different and are selected from the group which consists of hydrogen, substituted and unsubstituted  $\text{C}_{1-9}$ -alkyl, substituted and unsubstituted hydroxy- $\text{C}_{1-9}$ -alkyl, substituted and unsubstituted  $\text{C}_{1-9}$ -alkenyl, substituted and unsubstituted  $\text{C}_{1-9}$ -alkynyl, substituted and unsubstituted aryl, substituted and unsubstituted acyl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted aralkyl, substituted and unsubstituted heterocyclic radical, halogen,  $\text{OX}_{\text{XI1}}$  and  $\text{OX}_{\text{XI2}}$ , wherein  $\text{X}_{\text{XI1}}$  and  $\text{X}_{\text{XI2}}$  are the same or different and selected from the group which consists of hydrogen, substituted and unsubstituted  $\text{C}_{1-9}$ -alkyl, substituted and unsubstituted hydroxy- $\text{C}_{1-9}$ -alkyl, substituted and unsubstituted  $\text{C}_{1-9}$ -alkenyl, substituted and unsubstituted  $\text{C}_{1-9}$ -alkynyl, substituted and unsubstituted aryl,

substituted and unsubstituted acyl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted aralkyl, substituted and unsubstituted heterocyclic radical, in the  $R_{X13}$  and  $R_{X14}$  are the same or different and are selected from the group which consists of substituted and unsubstituted  $C_{1-26}$ -alkyl, hydroxy- $C_{1-26}$ -alkyl, substituted and unsubstituted aryl, substituted and unsubstituted acyl, substituted and unsubstituted aralkyl, substituted and unsubstituted  $C_{1-26}$ -alkenyl, substituted and unsubstituted  $C_{1-26}$ -alkynyl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted heterocyclic radical, halogen,  $OX_{X13}$  and  $OX_{X14}$ , wherein  $X_{X13}$  and  $X_{X14}$  are the same or different and are selected from the group which consists of hydrogen, substituted and unsubstituted  $C_{1-26}$ -alkyl, substituted and unsubstituted hydroxy- $C_{1-26}$ -alkyl, substituted and unsubstituted aryl, substituted and unsubstituted aralkyl, substituted and unsubstituted  $C_{1-26}$ -alkenyl, substituted and unsubstituted  $C_{1-26}$ -alkynyl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted heterocyclic radical, a silyl, a cation of an organic and inorganic base, in particular a metal of the first, second or third main group of the periodic system, ammonium, substituted ammonium and ammonium compounds which derive from ethylene diamine or amino acids, and their pharmaceutically acceptable salts, esters and amides and salts of esters.

18.-20. (CANCELLED)

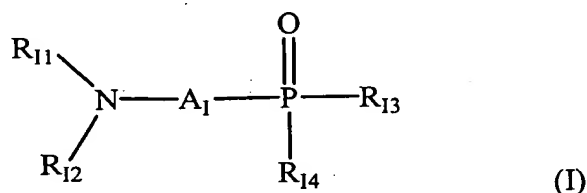
21. (CURRENTLY AMENDED) A method of treating and preventing infectious processes

~~Use of lipid metabolism inhibitors according to one of the proceeding claims for the therapeutic and prophylactic treatment of infectious processes in humans, animals and plants comprising administering an effective amount of at least one anti-infectiously active compound which inhibits the 2-C-methylerythrose-4-metabolic pathway and at least one lipid metabolism inhibitor and as herbicides in plants;~~

wherein the anti-infectiously active compound and the at least one lipid metabolism inhibitor are not identical.

22.-23. (CANCELLED)

24. (NEW) The method of claim 21, wherein the anti-infectiously active compound which inhibits the 2-C-methylerythrose-4-metabolic pathway comprises at least one aminohydrocarbyl phosphonic acid derivative of the general formula (I)



wherein  $\text{R}_{11}$ , and  $\text{R}_{12}$  are the same or different and are selected from the group which consists of hydrogen, hydroxy, substituted and unsubstituted acyl, substituted and unsubstituted alkyl, substituted and unsubstituted aryl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted aralkyl, and substituted and unsubstituted heterocyclic radical,

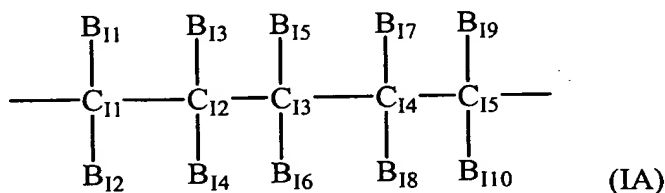
$\text{R}_{13}$  and  $\text{R}_{14}$  are selected from the group which consists of substituted and unsubstituted alkyl with 1 to 26 carbon atoms, substituted and unsubstituted hydroxyalkyl with 1 to 26 carbon atoms, substituted and unsubstituted aryl, substituted and unsubstituted acyl, substituted and unsubstituted aralkyl, substituted and unsubstituted alkenyl with 1 to 26 carbon atoms, substituted and unsubstituted alkynyl with 1 to 26 carbon atoms, substituted and unsubstituted cycloalkyl, substituted and unsubstituted heterocyclic radical, halogen,  $\text{X}_{13}$  and  $\text{X}_{14}$ ,

wherein  $\text{X}_{13}$  and  $\text{X}_{14}$  are independently selected from the group consisting of hydrogen,



substituted and unsubstituted alkyl with 1 to 26 carbon atoms, substituted and unsubstituted hydroxyalkyl with 1 to 26 carbon atoms, substituted and unsubstituted aryl, substituted and unsubstituted aralkyl, substituted and unsubstituted alkenyl with 1 to 26 carbon atoms, substituted and unsubstituted alkynyl with 1 to 26 carbon atoms, substituted and unsubstituted cycloalkyl, substituted and unsubstituted heterocyclic radical, a silyl, a cation of an organic and inorganic base, in particular a metal of the first, second or third main group of the periodic system, ammonium, substituted ammonium and ammonium compounds which derive from ethylene diamine or amino acids, and

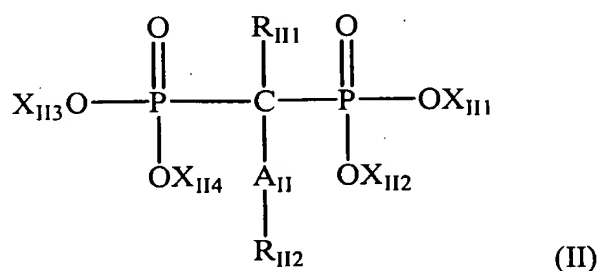
A<sub>1</sub> represents an alkylene radical, alkenylene radical or hydroxyalkylene radical or corresponds to the following formula (IA):



wherein one or more the carbon atoms, selected from the group C<sub>13</sub>, C<sub>14</sub>, C<sub>15</sub>, together with their substituents also may be absent, and at least one present substituent out of B<sub>11</sub> to B<sub>110</sub> is a C<sub>3-8</sub>-cycloalkyl-(C<sub>0-9</sub>)-alkyl group, wherein the C<sub>3-8</sub>-cycloalkyl group as well as the C<sub>0-9</sub>-alkyl group may comprise one or more double bonds and one or two carbon atoms of the cycloalkyl group may be replaced by nitrogen, oxygen or sulfur atoms, and wherein the cycloalkyl group as well as the alkyl group may be substituted with hydroxy, halogen, amino, oxo groups, with branched or straight C<sub>1-9</sub>-alkyl groups and C<sub>2-9</sub>-alkenyl groups, wherein the C<sub>1-9</sub>-alkyl groups and C<sub>2-9</sub>-alkenyl groups may be substituted with hydrogen, hydroxy, amino, halogen and oxo groups, and the remaining present substituents B<sub>11</sub> to B<sub>110</sub> are selected from the group which consists of hydrogen, hydroxy, amino groups, C<sub>1-26</sub>-alkyl radicals, C<sub>1-26</sub>-alkoxy radicals,

C<sub>1-26</sub>-alkoxy-C<sub>1-26</sub>-alkyl radicals or both substituents a C-atoms together form an oxo group, wherein each C<sub>1-26</sub>-alkyl radical and each C<sub>1-26</sub>-alkoxy radical may be branched or straight and saturated or unsaturated with one or more double bonds and may be substituted with hydroxy, amino, halogen and oxo groups.

25. (NEW) The method of claim 21, wherein the at least one lipid metabolism inhibitor comprises at least one bisphosphonic acid according to the general formula (II)



wherein X<sub>II1</sub>, X<sub>II2</sub>, X<sub>II3</sub>, and X<sub>II4</sub> are independently selected the group consisting of hydrogen, substituted and unsubstituted alkyl, substituted and unsubstituted aryl, substituted and unsubstituted aralkyl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted heterocyclic radical, metals of the first, second and third main groups of the periodic systems, substituted and unsubstituted ammonium and ammonium compounds derived from ethylene diamine or amino acids,

A<sub>II</sub>, if present, is selected from the group consisting of alkylene, alkenylene and hydroxyalkylene,

R<sub>III</sub> and R<sub>II2</sub> are independently selected from the group consisting of hydrogen, hydroxy, amino, substituted and unsubstituted acyl, substituted and unsubstituted alkyl, substituted and unsubstituted aryl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted aralkyl, substituted and unsubstituted heterocyclic radical and -SR<sub>II3</sub>, Cl and

-NR<sub>113</sub>R<sub>114</sub>, and wherein

R<sub>113</sub> and R<sub>114</sub> are independently selected from the group consisting of hydrogen, hydroxy, substituted and unsubstituted acyl, substituted and unsubstituted alkyl, substituted and unsubstituted aryl, substituted and unsubstituted aralkyl, substituted and unsubstituted cycloalkyl and substituted and unsubstituted heterocyclic radical, or their pharmaceutically acceptable salts, esters as well as salts of esters or compounds, which upon application provide the compounds to be administered as metabolic products or decomposition products.

THE REMAINDER OF THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY